

PART 4

PROPOSAL REQUIREMENTS

WASHINGTON STATE FERRIES

M.V. ELWHA

PROPULSION CONTROL SYSTEM REPLACEMENT

CONTRACT NO. 00-7171

PROPOSAL REQUIREMENTS

The following is a general description of the proposal requirements of Washington State Ferries' (hereinafter called "WSF") proposed M.V. Elwha Propulsion Control System Contract (hereinafter called the "Contract"). For specific details, all Proposers should refer to the applicable sections of the Request for Proposals ("RFP").

A. CONTENT

Technical Proposal

The Technical Proposal must contain all work and products necessary to accomplish the RFP requirements. The required information and format for the Technical Proposal shall be as specified in the following documents, which are attached hereto and incorporated herein:

Exhibit A	Technical Proposal Requirements;
Exhibit B	Customer Information Form;
Exhibit C	System Reliability Report; and
Exhibit D	Technical Proposal Format.

A Proposer may reproduce Exhibit B and/or Exhibit C to accommodate the responses, provided the order and content remains the same. A Proposer should submit only one (1) completed Exhibit B and C form per corporate or agency customer. The responses on the forms should be derived from actual operating personnel, to the maximum extent possible. See the RFP Specifications for more details on the technical requirements.

All Proposers should note the minimum experience requirements in Paragraph 3 of the Management, Organization and Facilities section of Exhibit A.

1 **Financial and Schedule Proposal**

2
3 The Financial and Schedule Proposal consists of: (i) the Financial and Schedule
4 Proposal form included in this RFP; (ii) any other financial data requested by WSF in
5 the RFP; and (iii) Proposal Security (for final proposal only) in the amount of five
6 percent (5%) of the Total Proposal Price for Award, as specified in this RFP.
7

8
9 **B. PRICING**

10
11 **1. General**

12
13 Proposals shall specify a total, fixed price for the Propulsion Control System
14 (PCS) upgrade on the Vessel, including but not limited to all design, fabrication,
15 installation, testing and regulatory agency certifications for the new PCS; (ii)
16 transport and delivery of the PCS to WSF at a specified location in Puget
17 Sound, Washington; (iii) spare parts and special tools; and (iv) crew training
18 costs. The price shall be specified on the RFP Financial and Schedule Proposal
19 form, and in the Technical Proposal, as may be requested.
20

21 Proposal prices shall be inclusive of all costs related to full performance of the
22 RFP and contractual requirements. **WSF will make no adjustment in the**
23 **Total Contract Price due to: (i) inflation occurring during the performance**
24 **of the Contract Work; (ii) foreign currency exchange rates; (iii) project**
25 **delays in award of this PCS Replacement Contract; or (iv) project delays in**
26 **the award of the shipyard installation contract.** The pricing terms and
27 conditions are specified in the RFP Financial and Schedule Proposal form and
28 the Contract.
29

30 All Proposers shall extend unit prices as required. In the event of an error in the
31 extension of prices, the unit prices shall prevail.
32

33 **2. Propulsion Control System**
34 **(including: Spare Parts, Special Tools and Contract Bid Support Package)**

35
36 Proposals shall specify a total, fixed price for the PCS, including all system
37 design, including preparation of a Contract Bid Support Package to support the
38 shipyards bidding on the separate shipyard installation contract, and other
39 design and engineering work; manufacturing, fabrication and delivery; spare
40 parts and special tools; commissioning, training and testing; project
41 management; local, on-site installation support; and regulatory agency
42 certifications for the new PCS.

1
2 **a. Spare Parts**
3

4 Proposals shall include an itemized list of the manufacturer's
5 recommended spare parts available for WSF inventory. The list shall
6 include descriptions, quantities, part numbers and costs (with subtotals
7 and totals) for one (1) complete PCS. For details, see Exhibit A attached
8 hereto. The Spare Parts prices in the Financial and Schedule Proposal
9 form must reflect this itemized list.

10
11 For a period of two (2) years after commencement of the Contract, WSF
12 shall have the right to purchase additional spare parts for the prices
13 specified in the successful proposal. Such acquisition shall be made via a
14 Contract Change Order or a WSF Purchase Order.

15
16 **b Special Tools**
17

18 Proposals shall include an itemized list of the manufacturer's
19 recommended Special Tools available for WSF inventory. The list shall
20 include descriptions, quantities and costs (with subtotals and totals) for
21 one (1) complete PCS. The Special Tools prices in the Financial and
22 Schedule Proposal form must reflect this itemized list.

23
24 **c. Contract Bid Support (CBS) Package**
25

26 Proposals shall also specify a fixed price for the CBS Package. See the
27 RFP Technical Specifications for a detailed description of the CBS
28 Package.

29
30 **3. Optional Modification of Propulsion Switchboard**
31

32 Proposals shall specify a total price for Optional Modification of Propulsion
33 Switchboard, as specified in Technical Specifications Sec. 5.6.7, in lieu of
34 modifying the Propulsion Switchboard specified in Technical Specifications
35 Sec. 5.6.1 – 5.6.6., to be incorporated by Contract Change Order. The price
36 for the Optional Modification of Propulsion Switchboard shall be specified on
37 the RFP Financial and Schedule Proposal form.

38
39 **4. Optional Refurbishment of SCR Cooling System**
40

41 Proposals shall specify a total price for Optional Refurbishment of SCR
42 Cooling System, as specified in Technical Specification Sec. 5.7.4.2, in lieu of
43 refurbishing the SCR Cooling System specified in Technical Specifications
44 Sec. 5.7.4.1., to be incorporated by Contract Change Order. The price for the
45 Optional Refurbishment of SCR Cooling System shall be specified on the
46 RFP Financial and Schedule Proposal form.

1
2 **5. Storage and Care of PCS**
3

4 In the event that the Delivery Date for this PCS Replacement Contract is
5 delayed due to a delay in the shipyard installation contract, the Contractor will
6 be required to store and care for the PCS at the Contractor's cost until a
7 revised Delivery Date is established.
8
9

10 **D. PROPOSAL PREPARATION**
11

12 A Proposer must submit one (1) original and seven (7) copies of its initial and final
13 proposal. Proposals should be presented in loose-leaf, three ring binders, in a neat,
14 orderly and comprehensive manner. The text is to be typewritten on 8.5" x 11" paper,
15 with no less than 1.25 line spacing and no smaller than 12 pitch. Foldouts must not
16 exceed 11" x 17". A reproducible copy of any drawing larger than 11" x 17" shall
17 also be provided. Elaborate brochures or other presentations beyond that sufficient to
18 present a complete and effective proposal are not desired. Elaborate artwork,
19 expensive paper and bindings, and expensive visual or other presentation aids are not
20 necessary.
21

22 The proposal categories shall be clearly identified, by tabs or separate binders.
23 Primary categories include: (i) Technical Proposal; and (ii) Financial and Schedule
24 Proposal; and (iii) Proposal Security. The Technical Proposal should be further
25 categorized as required in the content and format Exhibits attached hereto. Refer to
26 the RFP Specifications for additional details.
27
28

EXHIBIT A

TECHNICAL PROPOSAL REQUIREMENTS

Exhibit A

TECHNICAL PROPOSAL REQUIREMENTS

1 This section specifies certain information required to be submitted in the Technical Proposal
2 for the Propulsion Control System (PCS). This information is necessary to evaluate the
3 proposal in accordance with the RFP Proposal Evaluation document.
4
5

A. Proposal Prices

6
7
8 Proposers shall submit their PCS proposal prices in accordance with the instructions
9 of RFP Part 7, Financial and Schedule Proposal Form.
10
11

B. Reliability and Maintainability

1. Reliability History in Similar Applications

12
13
14
15
16 The Proposer shall submit with the proposal, at least three (3) reports from
17 current users of the proposed PCS in a similar application. These reports shall
18 be reviewed to assess the validity of the Proposer's claims with regard to the
19 system's reliability. The form of this report shall be identical to that which is
20 provided as "System Reliability Report" in RFP Part 4. The individuals filing
21 these reports must be English speaking, available for telephone interview, and
22 have detailed knowledge of the system's operation and maintenance. WSF
23 may call some or all of these references as well as any other encountered
24 sources with knowledge of the Proposer's system.
25

2. Labor and Parts Cost of Maintenance Service Actions and Time Between Actions

26
27
28
29 Proposers will provide a detailed analysis of all service action required for a
30 period of ten (10) years. This analysis shall include the expected part usage
31 with extended prices from the recommended spare parts list and the amount of
32 labor hours required for each action.

1 3. Spare Parts Cost

2
3 The Proposer shall provide a manufacturer's recommended spare parts list that
4 conforms to the requirements of the RFP Technical Specifications, Volume II,
5 Section 12. The prices shall be those charged if the parts were purchased on
6 the day of Contract award. Any reservations or allowances for system design
7 shall be explicit and priced in the spare parts list.
8
9

10 4. Machinery Arrangement to Support Maintenance
11 and Ease of Required Maintenance

12
13 The Proposer shall provide a description of those design aspects that facilitate
14 ease of routine maintenance. The proposer shall address all major
15 components (i.e., AC Modules, DC Modules, Propulsion Motor Drives) and
16 note the lack of vessel - specific required adjustments. On the subcomponent
17 level, the Proposer shall address the degree of interchangeability and
18 commonality within a given system.
19

20 5. Training

21
22 The Proposer shall submit a syllabus for the complete PCS maintenance
23 training program for the M.V. Elwha crew members. The Proposer shall also
24 include a list of all student training manuals and other documentation.
25 Graduates of the PCS training shall be certified to perform all maintenance
26 including that required by warranty.
27

28 6. Testing

29
30 The Proposer shall submit with its proposal a statement that it intends to fully
31 comply with the RFP Technical Specifications' requirements for a complete
32 schedule/plan of required factory and on-board testing for each major
33 component, as well as other related requirements. It is not necessary to
34 provide a full Testing Plan in the proposal.
35

1 **C. Management, Organization and Facilities**

2
3 1. Project and Design Organizations

4
5 The Proposer shall submit a narrative and organization chart for the proposed
6 project organization highlighting its ability to assure that the work is
7 accomplished satisfactorily and within the time allowed. The Proposer shall
8 describe divisions of responsibilities, lines of communications, and the
9 interface between the system contractor and the installation contractor.

10
11 2. Facilities

12
13 The Proposer shall submit a narrative description and drawing of proposed
14 facility to be used for the manufacturing and testing of the systems. The
15 Proposer shall discuss the physical plant and its ability to support the project
16 work and schedule. The Proposer shall discuss how critical facilities will be
17 made available given other work projected to be in process at this facility.

18
19 3. Personnel

20
21 The Proposer shall submit the resumes of all personnel that the Proposer
22 considers critical to the successful completion of the project. The Proposer
23 shall provide a narrative explaining why a person is considered critical and
24 indicate alternative personnel that may substitute if necessary.

25 **D. Experience in Performance of Similar Work**

26 The Proposer shall provide verifiable documentation describing previous shipboard
27 installations of electric propulsion control systems. The Proposer shall show a
28 minimum of three (3) years' cumulative experience with design, manufacture, and
29 installation of marine electric drive propulsion systems. The installed systems must
30 be shown to have performed successfully for a period of not less than three (3)
31 consecutive years. Further, the required three (3) years' experience shall be
32 subsequent to January 1, 1998.

33
34 The Proposer shall also provide at least three (3) reports from past and current
35 customers for the proposed propulsion control in a comparable use. The form of these
36 reports shall be identical to that which is provided as "Customer Information Form"
37 in RFP Part 4. The point of contacts identified in these forms must be English
38 speaking, available for telephone interview, and have detailed knowledge of the
39 system installation. WSF may call some or all of these references as well as any other
40 encountered sources with knowledge of the Proposer's system.

(END)

EXHIBIT B

CUSTOMER INFORMATION FORM

Exhibit B

CUSTOMER INFORMATION FORM

Proposer's Company Name: _____

Company Name: _____

Address: _____

State: _____ Zip: _____

Phone: _____

Name of point of contact: _____

Position Description: _____

Number of Years @ this Position: _____

Telephone Number: _____ Times available for telephone contact: _____

Type of Vessel(s) where system is used: _____

Number of Systems purchased: _____

Type of Service (Tug, Cruise, etc.): _____

Were you satisfied with the Proposer's ability to?

1. Manage the project?
2. Gain approvals from Authoritative Agencies (e.g. USCG)
3. Complete on schedule?
4. Provide post installation support?
5. Provide all required documentation?
6. Produce an overall high quality system?

Explain: _____

Were you satisfied with the Proposer's ability to?

1. Understand and abide by the contractual clauses?
2. Administer the contract without significant change orders?
3. Keep you completely aware of all issues that might impede the project?
4. Provide timely corrective action for critical discrepancies?

Explain: _____

EXHIBIT C

SYSTEM RELIABILITY REPORT

Exhibit C

SYSTEM RELIABILITY REPORT

Proposer's Company Name: _____

Company Name: _____

Address: _____

State: _____ Zip: _____

Phone: _____

Name of Individual filling out report: _____

Position Description: _____

Number of Years @ this Position: _____

Telephone Number: _____ Times available for telephone contact: _____

Type of Vessel(s) where system is used: _____

Location of Vessel(s): _____

Number of Systems @ this Location: _____

Certified Rating of Installed Engine(s): _____

Type of Service (Tug, Cruise, etc.): _____

RPM: (Constant or Indicate the range): _____

Number of operating hours on System: _____

Are you operating on a Tailored Maintenance Schedule or per the Standard Published Schedules?

Explain: _____

Estimate the frequency of down time and number of occurrences due to unscheduled repairs.

Explain: _____

List any unexpected or reoccurring failures with any system parts that required additional maintenance or caused unplanned down time:_____

Estimate your vessel duty cycle and report it in number of hours in a 24-hour period.

List the number of Inspections, Upgrades, and Major Overhauls that have occurred and at how many hours of operation. At Inspections, estimate the number of inspected parts that were replaced.

EXHIBIT D

REQUIRED TECHNICAL PROPOSAL FORMAT

Exhibit D

REQUIRED TECHNICAL PROPOSAL FORMAT

Each individual proposal shall still be organized as follows:

I. Performance Levels

A. Propulsion System

1 General Description

- a. Narrative, calculations, tables, sketches, etc. addressing the overall design philosophy and technical reasons for choosing the system concept and how this concept satisfies the requirements of the Technical Specifications, Volume II, Sections 5.0 through 5.3.2.5.
- b. Narrative, tables, sketches, etc., addressing the issue of availability required by the Technical Specifications, Volume II, Section 6.2.
- c. Narrative, tables, sketches, etc., addressing the issue of accessibility required by the Technical Specifications, Volume II, Section 6.3.
- d. Provide the System Logic Diagram in Appendix A.

2. Propulsion Switchboard

- a. Narrative, calculations, tables, sketches, etc. addressing all requirements of the Technical Specifications, Volume II, Section 5.6.

3. SCR Static Power Converters

- a. Narrative, calculations, tables, sketches, etc. addressing all requirements of the Technical Specifications, Volume II, Section 5.7.

4. Propulsion Controls and Instrumentation

- a. Narrative, calculations, tables, sketches, etc. addressing all requirements of the Technical Specifications, Volume II, Sections 5.9 and 5.10.

5. Function Blocks and PCS I/O

- a. Narrative, calculations, tables, sketches, etc. addressing all requirements of the Technical Specifications, Volume II, Section 13.0, specifically Drawings 8204-669-099-21 Propulsion Control System Functional Block Diagrams and 8204-669-099-22 Propulsion Control System (PCS) I/O List.

B. Drawings, Manuals, and Software

Narrative, tables, sketches, etc. addressing all requirements of the Technical Specifications, Volume II, Section 8.0, Drawings, Manuals, and Software.

C. System Testing

Narrative, calculations, tables, sketches, etc. addressing all requirements of the Technical Specifications, Volume II, Section 9.0, Testing.

D. Training

Narrative, tables, sketches, etc. addressing all requirements of the Technical Specifications, Volume II, Section 10.0, Training.

II. **Management, Organization and Facilities**

A. Project and Design Organizations

Narrative required by RFP Part 4, Proposal Requirements, Exhibit A, "Technical Proposal Requirements", **Management, Organization and Facilities**, Paragraph 1, Project and Design Organizations. The project organization chart shall be submitted in Appendix B.

B. Facilities

Narrative required by RFP Part 4, Proposal Requirements, "Technical Proposal Requirements", **Management, Organization and Facilities**, Paragraph 2, Facilities.

1
2 C. Experience in Performance of Similar Work

3
4 Narrative required by RFP Part 4, Proposal Requirements, Exhibit A,
5 "Technical Proposal Requirements", **Management, Organization and**
6 **Facilities**, Paragraph 3, Experience in Performance of Similar Work. The
7 "Customer Information Form" reports shall be provided in Appendix C.
8

9 D. Personnel

10
11 Narrative required by RFP Part 4, Proposal Requirements, Exhibit A,
12 "Technical Proposal Requirements", **Management, Organization and**
13 **Facilities**, Paragraph 4, Personnel. The resumes shall be provided in
14 Appendix D.
15

16
17 **III. Other Factors**

18
19 A. Operational Cost

20
21 Narrative plus data required by RFP Part 4, Proposal Requirements, Exhibit
22 A, "Technical Proposal Requirements", **Operational Cost Factors (10**
23 **years)**. The preliminary recommended system spare parts list shall be
24 provided in Appendix E.
25

26
27 B. Reliability

28
29 Narrative plus "System Reliability Reports" required by RFP Part 4, Proposal
30 Requirements, Exhibit A, "Technical Proposal Requirements", **Reliability**.
31 Reliability reports shall be provided in Appendix F.
32

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Required Appendices

Appendix A. System Logic Diagrams

Appendix B. Project Organization Chart

Appendix C. Customer Information Forms

Appendix D. Resumes

Appendix E. Recommended System Spare Parts Lists

Appendix F. System Reliability Reports

Appendix G. Training Documentation

(END)